

Self-Regulation of Online ESL Learners in a Sri Lankan Undergraduate Context

Sumudu Nisala Embogama

University of the Visual and Performing Arts, Sri Lanka
sumudu.e@vpa.ac.lk

Abstract

The COVID-19 pandemic has necessitated the rapid adoption of emergency remote teaching worldwide, including in Sri Lanka. With limited time for preplanning and a sudden shift to virtual instruction, students and educators faced unprecedented challenges. Compelled to learn within the confines of their homes, students were required to develop strategies to stay focused, directed, and motivated, as the monitoring gaze of the teacher became less salient in the virtual learning context. Hence, this case study investigated the presence of Self-Regulated Learning (SRL) among a group of undergraduate English as a Second Language (ESL) students engaged in online learning via the Zoom application. It also explored effective practices employed by ESL teachers to support self-regulated learning in this kind of learning environment. Using the exploratory research design, quantitative data were gathered from a convenience sample of 203 ESL learners who were following their year one English course virtually. Apart from a self-report online questionnaire shared among the respondents, semi-structured interviews were conducted to gather qualitative data to cross-tabulate the findings. Study findings reveal that participants demonstrated positive self-regulation, encompassing goal setting, environment structuring, time management, and help-seeking. The cultivation of self-regulated learners was facilitated by continuous teacher support, availability of teacher and peer assistance, and well-designed activities promoting self-regulation despite the virtual mode of learning. These outcomes underscore the importance of establishing a supportive and engaging virtual learning environment, even in the absence of physical classroom interactions. Sharing the good practices identified in this study, this research provides valuable recommendations for educators facing similar challenges. This study contributes to the evolving body of knowledge on effective pedagogical approaches during emergency remote teaching while also highlighting the significance of fostering self-regulated learning skills among students, enabling adaptation, and helping them to persevere in learning despite challenging circumstances.

Keywords: *COVID-19, Emergency remote teaching, Self-regulated learning, Virtual learning environment, ESL education*

1. Introduction

The COVID-19 pandemic has significantly impacted educational institutions, forcing them to adapt to the new reality of prolonged closures and the need for social distancing. To continue providing education, institutions such as schools and universities turned to online

Article history:

Received (September 18, 2023), Review Result (October 25, 2023), Accepted (December 3, 2023)

platforms as alternative modes of instruction. This shift from traditional face-to-face teaching and learning to that of online teaching and learning has necessitated the revision of pedagogies, to make these processes more effective and sustainable.

There have been a notable number of studies conducted regarding the effectiveness and drawbacks of teaching and learning online and this can be observed even in the context of English as a Second Language (ESL). While many of them have focused on learner and teacher attitudes towards online ESL development [1][2][3], there has been a notable gap in understanding the role that student-related factors such as motivation, self-regulation, goal setting, time management, autonomous learning skills, and cultural sensitivity play to ensure the successfulness of ESL courses in an online setting. Among them, one crucial factor that has received limited attention is Self-Regulated Learning (SRL), which plays a fundamental role in students' ability to effectively learn in virtual environments.

SRL encompasses the conscious or unconscious use of learning strategies by students, empowering them to take control of their learning process and assume responsibility for their education. According to Zimmerman [4], Self-Regulation (SR) refers to self-generated thoughts, feelings, and behaviours that are oriented to attaining goals. Zimmerman further explains SR as “not a mental ability or an academic performance skill; rather it is the self-directive process by which learners transform their mental abilities into academic skills [5]. This self-directive process becomes even more critical in distance learning, where self-management, self-monitoring, and motivation are essential due to the lack of a formal learning environment that is closely monitored by the presence of a teacher. Studies such as the one conducted by Bown [6] and Kormos & Csizer [7] have shown that autonomous learners who possess strong self-regulation skills perform better than those who rely heavily on their teachers. Conversely, a lack of self-regulation has been identified as a primary reason for student attrition in online courses [8].

Despite the obvious importance of SRL which is a critical skill for students to process notably in online learning, there is a dearth of research regarding its presence in online learning environments, particularly during the emergency remote teaching necessitated by the COVID-19 pandemic. This is more so in the Sri Lankan context, whereby, the literature review did not lead to any study conducted to assess SRL during virtual learning. To address this gap, the current study aimed to evaluate the presence of SRL among a group of undergraduates enrolled in an online ESL course at a Sri Lankan state university.

As such, the overarching objective was to critically interpret the manifestation of self-regulated learning among a cohort of adult ESL undergraduates in the online learning landscape and to offer pragmatic insights as well as suggestions for educators navigating the challenges of remote teaching post-COVID-19 based on the study findings. To achieve this intention, the research first sought to identify the extent of SRL among students learning ESL through fully online modes during emergency remote teaching. This evaluation focused on assessing the use of self-regulated learning strategies, including goal setting, time management, and self-evaluation. Secondly, the study aimed to provide ESL teachers with practical suggestions on how to support and promote self-regulated learning in similar online learning contexts.

This paper commences by providing an overview of self-regulated learning and its key features, drawing from existing literature. Subsequently, it examines the presence of SRL in an actual online ESL learning context by analyzing students' employment of self-regulated learning strategies. Finally, the paper reviews effective strategies that ESL teachers can employ to enhance the overall quality of their online English courses at the tertiary level, highlighting best practices in supporting self-regulated learning.

2. Related works

The COVID-19 pandemic has significantly disrupted traditional educational practices, leading to the widespread adoption of online learning platforms as an alternative mode of instruction [9]. This shift has necessitated the revision of pedagogical approaches, including those related to the teaching of English as a Second Language (ESL) [9]. While studies have explored curricular and content revisions in ESL courses as a result of this change of scene in the education sector, there appears to be a limited focus on student-related factors, such as learner motivation, autonomy, and self-regulated learning (SRL) that invariably contribute to the success of online ESL courses. Given the unique challenges and opportunities presented to learners in distant learning contexts, one has to be conscious of the sustainability of this endeavour.

Whether it is in a physical or virtual learning environment, the educational context and learners can be regarded as being in a dialectical relationship. The learners' potential to set learning goals, monitor their progress, and adopt suitable strategies to suit their learning styles can either be facilitated or undermined by the learning contexts. Studies have shown that learners need to be more self-directed, disciplined, and conscientious to thrive in an online educational setup than traditional classroom content [10]. If not, as Wang and Lin [11] point out, despite the potential of online learning as being more flexible because it allows learning to happen at any time and any place, the pitfall could be that students can get easily distracted, and disengage with the task of learning much faster than in a physical educational scenario.

Since the study aims to examine the presence of SRL among undergraduate ESL students in online learning contexts and provide suggestions for ESL teachers to support self-regulated learning, the following presents a succinct definition of SRL, prominent SRL models, and some studies that have considered SRL on academic contexts with special focus given to ones that are related to ESL.

2.1. Self-Regulated Learning (SRL)

Self-regulated learning involves the regulation of one's cognitive, metacognitive, and motivational processes to achieve learning goals [12]. SRL strategies empower learners to take control of their learning process, actively engage in learning tasks, and become responsible for their academic success [13]. Examples of SRL strategies include goal setting, metacognitive monitoring, seeking assistance, and self-evaluation [13][14].

2.1.1. SRL models

Several SRL models have been proposed in the literature to understand the processes involved in self-regulated learning. Among them, Zimmerman's three-phase cyclical model is widely recognized and utilized [15]. According to Zimmerman [13], SRL occurs in three phases: forethought, performance, and self-reflection. In the forethought phase, learners set goals, develop task strategies, and establish their motivation for learning. The performance phase involves the actual execution of learning tasks, while the self-reflection phase focuses on evaluating one's performance and making adjustments for future learning.

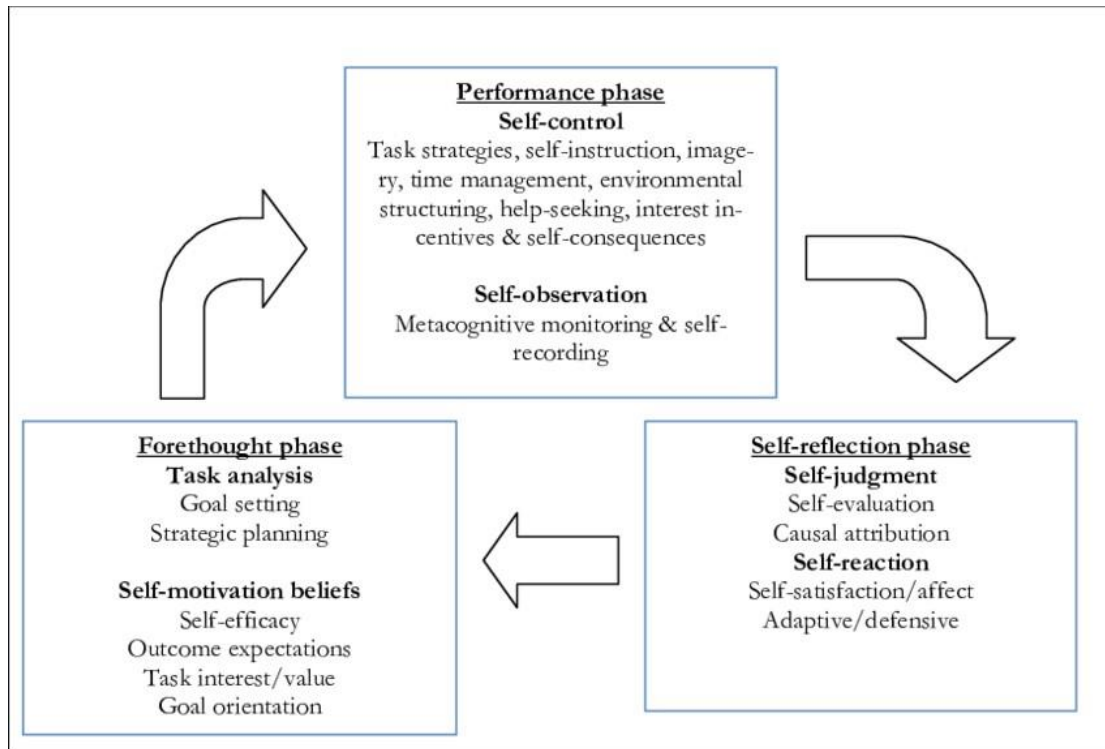


Figure 1. Phases and sub processes of self-regulation [5]

2.2. Importance of SRL in academic performance

Numerous studies have demonstrated the positive impact of SRL on academic performance among undergraduate students [16]. SRL is associated with increased motivation, engagement, and effective learning strategies, leading to improved learning outcomes [12][17]. In the context of online courses, SRL has been identified as a critical factor for success due to the emphasis on learner autonomy and self-management [9]. The self-regulated learner can navigate the challenges of online education by setting goals, managing time effectively, and regulating their learning to support their academic achievements in the digital learning landscape. Moreover, autonomous learners who possess self-regulation skills tend to perform better and exhibit higher levels of persistence in online learning environments [18].

2.3. SRL Strategies in online learning

As mentioned previously, research suggests that implementing strategies to foster SRL in online courses can enhance student engagement and achievement [13]. The following SRL strategies are particularly relevant in online learning contexts:

1. **Goal Setting:** Setting educational goals or sub-goals helps students exert effort and focus on specific learning objectives [13][19]. This involves selecting and setting individual learning standards for both short-term and long-term goals.
2. **Strategic Planning:** This refers to how students plan the sequence, timing, and completion of learning activities to achieve their goals [13]. As such, effective strategic planning can help students allocate their time and resources efficiently.

3. **Environmental Structuring:** According to this concept, students modify physical environments to minimize distractions and create conducive learning spaces [17]. For instance, creating a quiet study area and systematically organizing learning materials can promote focus and concentration.
4. **Self-Evaluation:** Setting quality standards and criteria for self-assessment enables students to monitor their progress and make necessary adjustments [13]. Self-evaluation involves a student's capacity to reflect on the learning process and identify areas for improvement.
5. **Task Strategies:** Organizing, planning, and managing study time and learning tasks are crucial prerequisites for effective self-regulation [13]. Examples of task strategies include effective time-management skills, note-taking techniques, and active engagement with instructional materials.
6. **Elaboration:** This refers to the integration of new knowledge with prior knowledge and the construction of meaningful connections to enhance learning outcomes [13]. In this process, a student extends and modifies learning materials to create deeper understanding and retention [17].
7. **Help-Seeking:** A student's ability to seek assistance from teachers, peers, and external resources is crucial for overcoming challenges and acquiring support when needed [17]. Effective help-seeking behaviors can contribute to productive independent and self-directed learning.

2.4. The impact of technology on SRL in ESL learning

Advancements in technology have expanded the dimensions of SRL in ESL learning contexts [20]. Online platforms and digital tools provide ESL learners with access to a wide range of resources and authentic language materials all of which are accessible to them granted the effort to do so is made. An example of this is flipped learning whereby the learning resources and content are shared in advance for the students to consume before actual class time whereby students share their understanding of a particular topic and engage in activities to further expand their knowledge of it along with the guidance of their teachers. This kind of pedagogy has demonstrated the potential to enhance self-regulated learning by promoting learners' self-efficacy and their strategies for planning and utilizing study time [21]. SRL not only enriches the language classroom but also extends learning beyond its physical boundaries, offering opportunities for autonomous learning and independent exploration [21][22][23].

As can be seen from the above literature review, self-regulated learning plays a critical role in sustaining online ESL courses, since without the presence of learner autonomy and independent study skills the learners would be unable to obtain the full potential of the learning experience. This section of the study explored the concept of SRL, its importance for academic performance, and the relevance of various SRL strategies in online learning contexts. It also noted how SRL functions in ensuring effective learning not just in physical but also virtual learning spaces. Based on the studies that have been conducted about the presence of SRL in online education, we can assert that by empowering ESL students with self-regulation skills, educators can foster active engagement, and motivation, and ultimately, improve learning outcomes in online ESL courses.

3. Methods

3.1. Study design

The present study employed an exploratory research design, aiming to explore and gain insights into the phenomenon of self-regulated learning in the context of online ESL learning. This case study utilized a mixed methods approach, combining quantitative data collection through a questionnaire and qualitative data collection through semi-structured interviews.

3.2. Participants and research context

The study sample consisted of 203 online ESL learners who were enrolled in the first-year English course offered by a faculty in a Sri Lankan university. Based on the English proficiency test conducted before their enrolment in the course, a majority of the students' proficiency level can be classified as A2 according to the Common European Framework of Reference for Languages (CEFR). This means that they have basic communication skills and can largely handle and produce simple, straightforward utterances related to everyday contexts

These students follow either dance or drama majors for their bachelor's degree. Out of a total of 293 students in the batch, a response rate of 87% was achieved for the short version of the Online Self-Regulated Questionnaire administered as a Google form. The gender distribution of the respondents reflected the actual gender distribution of the student population, with 86% females and 14% males. The age of the participants ranged from 19 to 23, with the majority falling into the 21-year-old category (52.8%), followed by 22 years (24.2%).

Permission to gather data from the students was obtained from the Dean of the faculty. The link to the online questionnaire was shared among the students using the WhatsApp group with a message stating that participation in the study was purely voluntary. Also, the volunteer participants were assured of confidentiality and anonymity.

By the time the questionnaire was shared among them, the respondents had already had sufficient exposure to virtual learning as they followed a 100-hour online Basic English course before commencing their first semester, which was also offered to them online.

3.3. Research setting and course description

The study focused on the English course titled "English for General and Academic Purposes - Beginners' Level," which is a compulsory non-credit course offered to first-year undergraduates of the university. The course had traditionally been delivered in a face-to-face mode. However, due to the prolonged closure of Sri Lankan educational institutions, which lasted approximately one and a half years, the course had to be shifted to a fully online mode. In the online setting, learners attended lectures virtually through the Zoom video conferencing platform, with four one-and-a-half-hour sessions per week. Additionally, students had access to a custom-designed grammar course hosted on the university's Learning Management System (LMS) as self-learning material. Recorded versions of the lectures, lesson modules, and supplementary study materials were available on the LMS. Furthermore, students were provided with links to language learning websites and YouTube tutorials to support their learning. It should be noted that, on average, approximately 230 out of the total 293 students attended the online sessions regularly.

3.4. Data collection instruments

To measure the presence of Self-Regulated Learning (SRL) among the participants, the study utilized an adapted version of the Online Self-Regulated Learning Questionnaire (OSLQ). The short version of the OSLQ consisted of 24 items, and participants rated their responses on a 5-point Likert scale, ranging from strongly agree (5) to strongly disagree (1). These items fall under one of the six subscale constructs that were measured; namely, environment structuring, goal setting, time management, help-seeking, task strategies, and self-evaluation. The selection of this instrument was based on its specific focus on evaluating SRL in an online learning environment, as well as its established validity and reliability. To ensure comprehensibility, all items were translated into Sinhala so that respondents would be able to clearly understand them.

3.5. Data collection and analysis

Data collection involved administering the adapted OSLQ questionnaire through a Google form to the participants. The responses were then analyzed using the SPSS software (version 20). Descriptive statistics were employed to compute individual mean scores for each of the six self-regulated learning strategies: goal setting, time management, self-evaluation, environmental structuring, task strategies, and help-seeking. A composite mean score was also calculated by averaging the mean scores for all SR strategies.

In addition to the quantitative data analysis, qualitative data were collected through semi-structured interviews conducted with 14 volunteer participants from the cohort. The interviews were conducted virtually according to the convenience of the participants and they were recorded with their informed consent. Through the initial coding, done manually, recurring ideas were noted as potential themes. Subsequently, the themes were carefully reviewed and categorized under the six self-regulated learning strategies that were the foci of this study. The findings of the qualitative analysis were meant to complement and cross-validate those obtained from the quantitative analysis of the OSLQ responses.

4. Results and discussion

4.1. Extent of self-regulated learning (SRL)

The primary objective of this study was to identify the extent of Self-Regulated Learning (SRL) among ESL learners in an online course. The analysis of mean scores and standard deviations for each SRL strategy provides insights into the prevalence and variability of different self-reported strategies among the participants.

Table 1. Mean scores and standard deviations for each SRL sub-category

SRL sub-category	Mean Score	Standard Deviation
Goal setting	4.37	0.53
Environmental structuring	4.31	0.59
Time management	4.21	0.65
Help-seeking	4.19	0.57
Task strategies	4.15	0.62
Self-evaluation	4.07	0.69

The results indicate that the most pronounced SRL strategies reported by the participants were goal setting ($M=4.37$, $SD=0.53$). The respondents clearly express a clear intention to pursue the online ESL course through the establishment of specific objectives and targets which they aim to achieve by the end of it. As one student points out:

“Our English lecturers always reminded us of the importance of following the lessons and what the ultimate course objectives were. This helped me to set clear targets which kept me following the course no matter how difficult it was to join the session using my phone”
Student 07

The environmental structuring ($M=4.31$, $SD=0.59$) score is the second-highest mean score. This finding suggests that apart from the majority of the learners actively engaging in setting goals, they also strived to create a conducive learning environment for themselves during the online learning period. In the interviews, several students mentioned that they joined the sessions from within their bedrooms and said that the suggestion given by the teachers to ensure that the study table and chair face away from the bed made them less inclined to get distracted and lethargic. Interestingly, five students stated that they managed to find a suitable study spot outside their homes. Since they lived in rural areas, there was a pleasant open environment with lots of greenery and calming scenes, and as per these students, the comforting natural environment made the eye strain less and reduced the alienating feeling of learning through a machine with no human contact. Since goal setting and environment structuring occur in the forethought phase of self-regulated learning, it can be premised that these learners can be profiled as the “forethought-endorsing self-regulators”.

Additionally, respondents were adaptable at time management ($M=4.21$, $SD=0.65$):

“Our timetables were arranged in such a way that we did not have an overload of lectures. That made it possible for us to manage our time to follow the online sessions and also to look at the lessons and extra recourses shared by the lecturers through the LMS” – Student 04.

Some of the students pointed out that the time taken to travel back and forth from university during physical classes and the time needed to get ready for university was not needed during this distance learning period which saved time for them to focus more on learning-related endeavors.

Help-seeking ($M=4.19$, $SD=0.57$), and task strategies ($M=4.15$, $SD=0.62$) displayed high mean scores and moderate standard deviations, indicating their significant utilization with some variation among the participants. The participants indicate that they seek assistance from external sources such as their teachers, peers, or even online resources when faced with difficulties or challenges during learning. Help-seeking is a significant aspect of SRL, reflecting on learners’ willingness to acknowledge the need for support, and the ability to take steps to address gaps in understanding or overcome obstacles. As most of the interviewees noted, the fact that the teachers constantly reiterate their willingness to support students by getting them to virtually raise their hands, ask questions, and use the chat option to request clarification had encouraged them to request assistant when needed. Moreover, developing appropriate task strategies to complete assignments, exercises, and educational activities is also considered possible by the students who claim that the explicit guidance given in this regard has been the main reason for strategically accomplishing set objectives.

When considering all six subcategories, the least common SRL strategy employed was self-evaluation, with a mean score of 4.07 ($SD=0.69$). Even though this received a mean score of above 4 out of 5, the fact that it is comparatively less has to be given due attention. Self-evaluation which has to do with the self-reflection phase is where learners engage in the

metacognitive process of reviewing and evaluating their performance and progress. This means that they should be in a position to critically assess their progress in the task of learning the second language online. The fact that it is not so prevalent could be because in the online space, feedback is limited and students may have doubts about their mastery of a specific language skill or language function. Self-reflection is crucial for the development of self-regulation skills; hence, the findings suggest that encouraging such activities would be beneficial for learners to further progress in their studies.

Taking into account the total mean score of 4.20 (SD=0.61) generated for all six SRL variables, it is evident that the study sample exhibits a significantly high level of self-regulation when it comes to learning ESL in an online platform with moderate variability.

4.2. Positive learning experience and learner autonomy

During the semi-structured interviews, participants expressed positive sentiments regarding their learning experience in the online course. They attributed their positive experience to the opportunity to actively participate in the course and the teachers' encouragement to engage in autonomous learning activities, both self-directed and teacher-directed.

The participants stated that they had the opportunity to voice their opinions on how activities and assessments should be implemented, and they were presented with options when completing tasks. This sense of control over their learning experiences empowered them to organize and rehearse information, develop positive beliefs about their language development capabilities, and place a high value on acquiring language competency. The participants demonstrated a proactive approach by setting goals, striving to achieve them through perseverance, and balancing psychological factors such as goal setting and self-evaluation with physical factors such as environmental structuring and help-seeking. The encouragement and promotion of learner autonomy by the instructors appeared to have empowered the participants and made them responsible for their learning process.

According to the responses received, the assignment of group projects and the adoption of task-based learning approaches encouraged goal-setting among the participants. Clear guidelines and deadlines for submissions, along with constant reminders and motivational lectures on the importance of learning English, contributed to their ability to manage their time effectively. They also stated that seeking help from peers and teachers was facilitated through the WhatsApp group, during the synchronous virtual classes on Zoom. The participants expressed comfort in seeking and obtaining support from their teachers, particularly appreciating the chat option that allowed for private or group inquiries. Interestingly, some of them pointed out that the online learning environment reduced anxiety and self-consciousness experienced when learning ESL in a face-to-face context and that the anonymity offered in virtual platforms enabled even shy and self-conscious learners to seek help more openly.

4.3. Persistence and challenges faced

Although task strategies and self-evaluation received relatively lower mean scores compared to other SRL strategies, they still indicated a positive agreement level with moderate variability. These strategies relate to students' persistence, self-monitoring, self-judgment, and effort regulation when facing educational challenges. The findings suggest that since these learners are low-proficient ESL users, they experienced challenges in self-judgment and self-direction, which affected their engagement in self-evaluation.

During the interviews with students, many of them said that they initially felt skepticism about the effectiveness of online English learning and were less confident in their ability to regulate their learning. However, they mentioned that after continuing to follow online lessons, access materials, and interactive teaching methods, their mindset shifted. They seemed to have gradually developed effective learning strategies through practice, exposure, and the belief that they were capable of acquiring language skills. It appears that peer collaboration and teacher feedback played essential roles in fostering their self-efficacy, which further enhanced their persistence and self-regulated learning behaviors.

4.4. Implications for ESL teaching and future research

The results of this study have significant implications for ESL teaching in online contexts. Firstly, based on the study findings, we can note how fostering learner autonomy and providing opportunities for active participation are crucial in promoting self-regulated learning in online learning contexts.

ESL teachers should explicitly instruct students on setting goals, environmental structuring, time management, and promoting help-seeking behaviors so that students can consciously employ these skills. Based on the comments given by the students, creating an inclusive and supportive online learning environment that encourages open communication, timely feedback, and assistance is also essential for promoting SRL. In addition, implementing task-based learning and incorporating peer and self-evaluation activities can be effective in promoting self-regulated learning among ESL learners.

Future research can focus on investigating the long-term effects of self-regulated learning on language proficiency and exploring the effectiveness of specific instructional interventions in promoting self-regulation in online ESL contexts. Furthermore, studies can explore the individual differences that influence the adoption of self-regulated learning strategies among ESL learners, such as language proficiency, cultural background, and prior educational experiences. By expanding the understanding of self-regulated learning in online ESL courses, educators can enhance instructional practices and provide tailored support to promote successful language learning outcomes.

5. Conclusion

This study sheds light on the presence of self-regulation among ESL learners in the context of emergency remote learning prompted by the COVID-19 pandemic. The findings reveal that these learners actively engage in self-regulated learning practices, as indicated by the self-reporting data collected. The online course delivery and the teachers' efforts in explicitly and implicitly introducing self-regulated learning strategies have played a crucial role in promoting the presence of self-regulation among the participants. By creating an environment that encourages learner autonomy and providing guidance and support, the teachers have empowered the students to take control of their learning process.

The study highlights the importance of positive self-regulated learning practices in e-learning contexts, where learners are required to be responsible for their learning without the physical presence of teachers. It also suggests several implications for ESL teachers in promoting self-regulated learning among learners in virtual environments. Moreover, it highlights the significance of scaffolding and providing support to learners in online courses.

Overall, this research underscores the presence of self-regulation among ESL learners in the context of emergency remote learning. By understanding and harnessing the potential of

self-regulated learning strategies, educators can empower learners to become active participants in their learning journey, leading to improved language acquisition outcomes.

References

- [1] S. Syahrin and A. S. Abdelrahman, "An ESL online classroom experience in Oman during COVID-19," *Arab World English Journal (AWEJ)*, vol.11, no.3, (2020) <https://ssrn.com/abstract=3705064>
- [2] L. B. Anak and M. Yunus, "ESL teachers' challenges in implementing e-learning during COVID-19," *The International Journal of Learning, Teaching and Educational Research*, vol.20, no.2, (2021) <http://ijlter.net/index.php/ijlter/article/view/164>
- [3] A. Cheung, "Language teaching during a pandemic: A case study of zoom use by a secondary ESL teacher in Hong Kong," *RELC Journal*, vol.54, no.1, pp.55-70, (2023) DOI: 10.1177/0033688220981784
- [4] B. J. Zimmerman, "Attainment of self-regulation: A social cognitive perspective," In M. Boekaerts, P.R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation*, San Diego, CA: Academic Press. pp.13-39, (2000)
- [5] B. J. Zimmerman, "Becoming a self-regulated learner: An overview, theory into practice," vol.41, no.2, pp.64-70, (2002) DOI:10.1207/s15430421tip4102_2
- [6] J. Bown, "Self-regulatory strategies and agency in self-instructed language learning: A situated view," *Modern Language Journal*, vol.93, no.4, pp.570-583, (2009) DOI: 10.1111/j.1540-4781.2009.00965.x
- [7] J. Kormos and K. Csizer, "The interaction of motivation, self-regulatory strategies, and autonomous learning behavior in different learner groups." *TESOL Quarterly*, vol.48, no.2, pp.275-299, Advance online publication, (2014), DOI:10.1002/tesq.129
- [8] L. Peck, J. E. Stefaniak, and S. J. Shah, "The correlation of self-regulation and motivation with retention and attrition in distance education," *Quarterly Review of Distance Education*, vol.19, no.3, pp.1-80, (2018)
- [9] N. Dabbagh and A. Kitsantas, "Online learning in response to the COVID-19 pandemic: Emerging perspectives," In J. McDonald & D. Panagiotopoulos (Eds.), *Handbook on Digital Learning for K-12 Schools*. Global Vision Press, pp.123-145, (2023)
- [10] P. D. Bell, "Predictors of college student achievement in undergraduate asynchronous web-based course," *Education*, vol.127, no.4, pp.523-533, (2007)
- [11] S. Wang & S. J. Lin, "The application of social cognitive theory to web-based learning through NetPorts." *British Journal of Educational Technology*, vol.38, no.4, pp.600-612, (2007)
- [12] B. J. Zimmerman and D. H. Schunk, "Self-regulated learning and performance: An introduction and an overview," In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance*, Routledge, pp.1-12, (2011)
- [13] B. J. Zimmerman, "Self-regulated learning and academic achievement: An overview," *Educational Psychologist*, vol.25, no.1, pp.3-17, (1990) DOI: 10.1207/s15326985ep2501_2
- [14] N. E. Perry and A. Rahim, "An investigation of self-regulation, goal orientation, and academic achievement by using a multivariate multilevel model," *Metacognition and Learning*, vol.6, no.3, pp.229-247, (2011) DOI: 10.1007/s11409-011-9078-9
- [15] E. Panadero and J. Alonso-Tapia. "How do students self-regulate? Review of Zimmerman's cyclical model of self-regulated learning," *Anales de Psicología*, vol.30, no.2, pp.450-462, (2014) DOI:10.6018/analesps.30.2.166221
- [16] L. Nota, S. Soresi, and B. J. Zimmerman, "Self-regulation and academic achievement and resilience: A longitudinal study," *International Journal of Educational Research*, vol.41, no.3, pp.198-215, (2004) DOI:10.1016/j.ijer.2005.08.007
- [17] P. R. Pintrich, "A conceptual framework for assessing motivation and self-regulated learning in college students," *Educational Psychology Review*, vol.16, no.4, pp.385-407, (2004) DOI: 10.1007/s10648-004-0006-x

- [18] S. Y. Lee and J. H. Choi, "Pedagogical implications for online English as a Second Language (ESL) instruction in the COVID-19 era," (2022) DOI: 10.1016/j.system.2022.102599
- [19] D. H. Schunk and B. J. Zimmerman. (Eds.). "Motivation and self-regulated learning: Theory, research, and applications," Routledge, (2012)
- [20] C. A. Chapelle, "Computer assisted language learning: What's New?" Annual Review of Applied Linguistics, vol.30, no.1, pp.73-96, (2010)
- [21] K. Anastasia, "Self-regulation of learning in online learning environments: A review of the empirical literature," International Journal on E-Learning, vol.12, no.4, pp.419-432, (2013)
- [22] C. -W. Lai, "Digital Game-Based Learning (DGBL) in the L2 Classroom: The impact of the UN's digital agenda for education," Computers & Education, vol. 68, pp.504-514, (2013)
- [23] M, Catherine and M. J. W. Lee. "Personalized and self-regulated learning in the web 2.0 era: International Experiences," Australasian Journal of Educational Technology, vol.26, no.1, pp.28-43, (2010)

Author



Sumudu Nisala Embogama

Sumudu Embogama is a Senior Lecturer in English Language at the University of the Visual & Performing Arts, Sri Lanka. She holds a Ph.D. in Linguistics from the University of Kelaniya and serves as the Head of the Department of English Language Teaching at her university. With expertise in online learning, gender studies, teaching English as a second language, and second language learner motivation, she has contributed to the field. Embogama's academic qualifications include a B.A. in English (Honors) and M.A. degrees in English and Linguistics.